

## BSI-08

### Cryogenic Cooler

#### Data Brief

#### I. Product Features

- Compact structure, small size, and lightweight
- Low mechanical vibration and noise
- High reliability, MTTF $\geq$ 15,000h
- Built-in integrated controller
- Temperature stability  $\leq \pm 0.2\text{K}$

#### II. Technical parameters

Table 1

| PARAMETER                                 | VALUE                                |
|-------------------------------------------|--------------------------------------|
| Cooling capacity                          | 1100mW@23°C                          |
| Input voltage                             | 24V <sub>DC</sub>                    |
| Cool down time                            | 5min@77K@23°C@500J                   |
| MTTF                                      | $\geq 15000\text{h}$                 |
| Steady state input power                  | 15WDC@550mW@77K@23°C                 |
| Maximum input power                       | 36WDC                                |
| Acoustic noise                            | $\leq 45\text{dB}$                   |
| Operating / Storage / Ambient temperature | -40°C ~ 70°C / -55°C ~ 85°C          |
| Temperature stability                     | $\pm 0.2\text{K}$                    |
| Temperature shock                         | -55°C ~ +85°C                        |
| Cold tip temperature range                | 65K-110K                             |
| Weight                                    | $\leq 580\text{g}$ (excluding Dewar) |

### III. Product curves

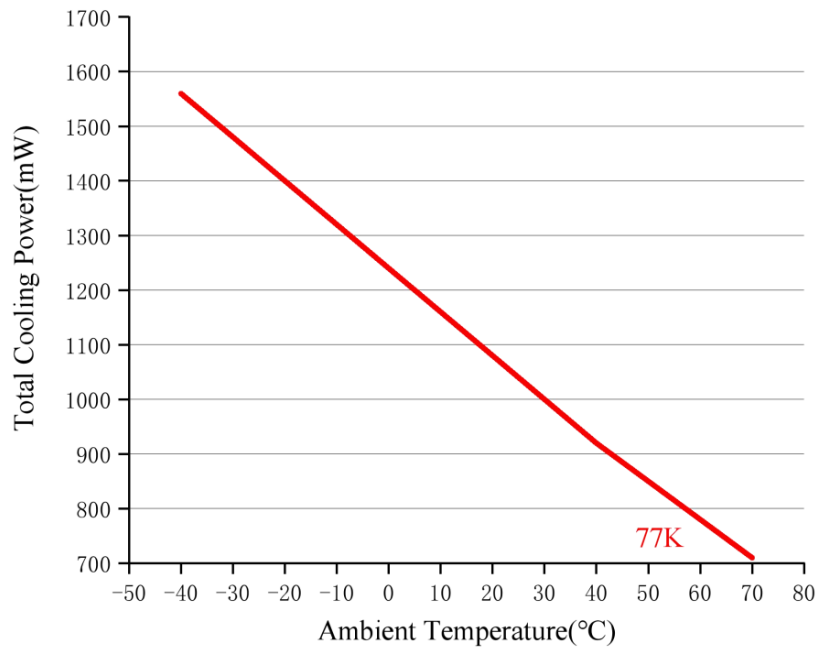


Figure 1. Cooling Power vs. Ambient Temperature

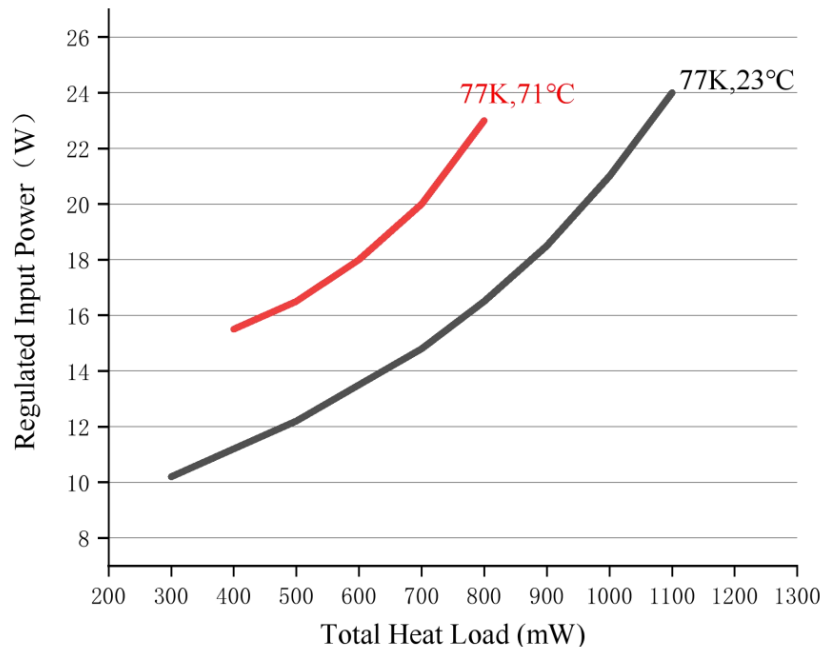


Figure 2. Regulated Input Power vs. Total Heat Load

## IV. Outline Dimensions

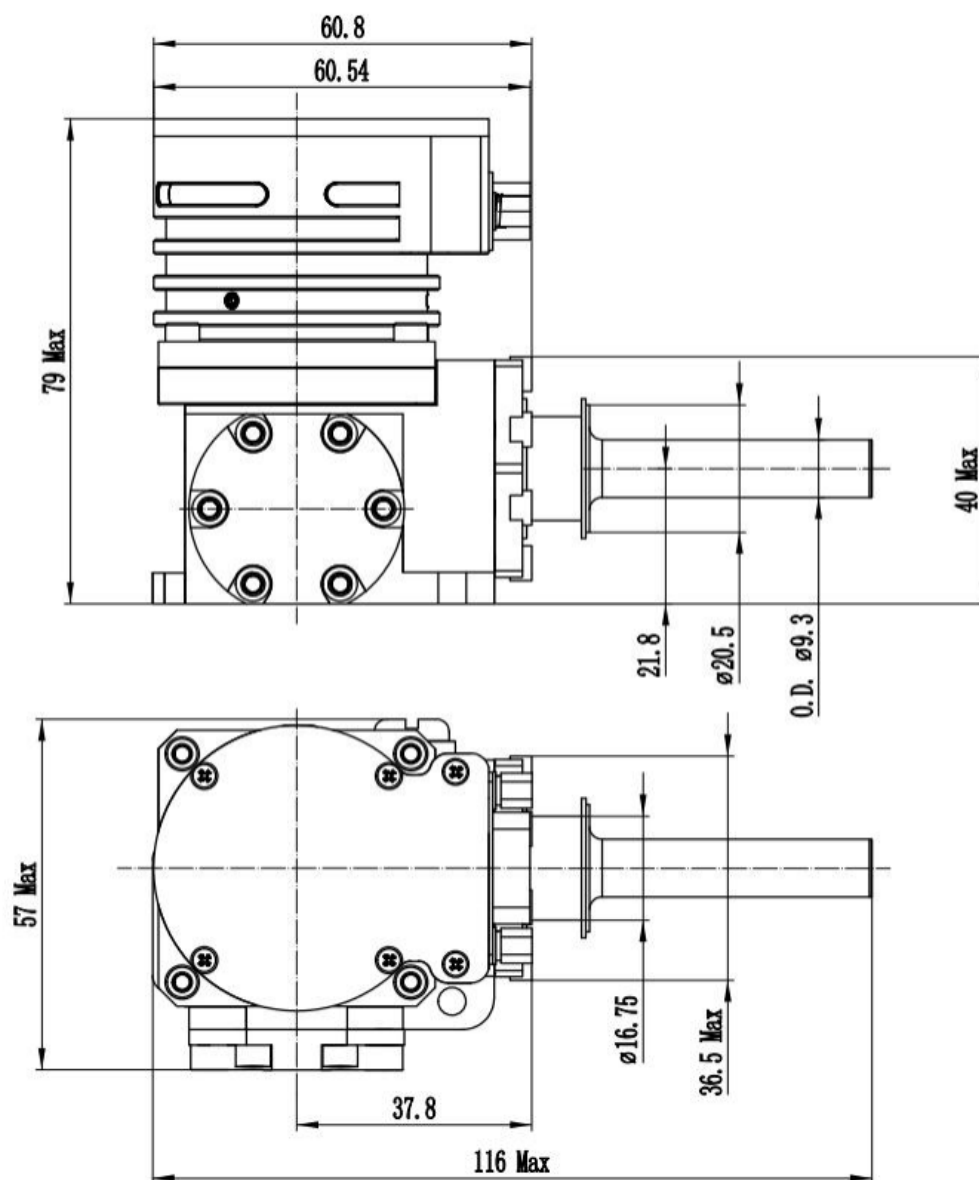


Figure 3. BSI-08 outline dimensions